

**Low voltage municipal distribution systems with artificial neutrals.** K. I. KUZOVET. *Elektricheskoe* (No. 9) 45-54 (1947) *In Russian.*—A mathematical analysis of a circuit with a balancing transformer is made and currents and voltages in all parts of the circuit are calculated. Vector diagrams of systems with earthed and unearthing neutrals are given. Tables are drawn out for both cases, showing currents and voltages in a typical system with varying degrees of unbalance. Details are given of a typical Russian made air-cooled balancer. The application of balancers to increase the capacity of networks already fully loaded is discussed. M. B.

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CIA-RDP86-00513R000927430002-4"

USER/Electricity  
Power Transmission  
Voltage Regulators

Dec 1947

"Regulation of the Feeder Voltage as Means of Lowering the Energy Losses in City Power Circuits," A. A. Kulikovskiy, Engr., 4 pp

RA 50114

"Elektricheskii" No 12

Has been noticed for long time that voltage eventually carrying at the point of use was much lower than at the point of source. Some loss inevitable. Author discusses system of transformers that can be used to equalize the voltage and greatly cut down energy losses in feeder lines. States that method he suggests to be used only as supplement to already existing means of decreasing energy losses.

50114

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KULIKOVSKIY, A.A.

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927430002-4

KULIKOVSKIY, A. A."

"New Developments in Radio Reception Techniques", Gosenergoizdat, 120 pp, 1950.

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CIA-RDP86-00513R000927430002-4"

KULIKOVSKIY, A. A.

178T57

USSR/Electricity - Distribution Systems Apr 51

Transformers

"Responses to N. P. Tikhonov's Article 'Grounding the Neutral Points of Transformer Windings in 380-V Networks' (Elektrичество, No 4, 1951),"  
I. A. Syromyatnikov, Cand Tech Sci, Tech Adm of  
Min Elec Power Sta, Engr A. A. Kulikovsky, Moscow,  
cov, L. P. Podol'skiy, Cand Tech Sci, Moscow  
Planning-Constr Adm of "Tsentrrolektronmontazh"

"Elektrичество" No 4, pp 74-76

Syromyatnikov agrees that Tikhonov has found a  
defect, but believes the remedy should be pre-  
ventive high-voltage insulation tests rather  
178T57

USSR/Electricity - Distribution Systems Apr 51  
(Contd)

than grounding of transformer neutrals. Other  
2 writers agree with Tikhonov that "Rules for  
Grounding Electrical Equipment Carrying Voltages  
Up to 1,000 V" should be rewritten to make it  
easier to ground neutrals.

178T57

KHAYKIN, S.E.; KULIKOVSKIY, A.A., redaktor; LARIONOV, G.Ye., tekhnicheskiy  
redaktor

[Continuous oscillations] Nezatukhaiushchie kolebaniia. Moskva,  
Gos. energ. izd-vo, 1953. 125 p. (Massovaia radiobiblioteka, no.181)  
[Microfilm] (MLRA 7:10)  
(Oscillators, Electron-tube)

*KULIKOVSKIY A.A.*

LEVITIN, Ye.A.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G.,  
redaktor; KULIKOVSKIY, A.A., redaktor; MOZHACHEVLOV, B.N., redaktor;  
SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; THAMM, B.P., re-  
daktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; SPIKHEV-  
SKIY, I.I., redaktor; FRIDKIN, A.M., tekhnicheskij redaktor.

[Superheterodyne] Supergeterodin. Moskva, Gos. energ. izd-vo, 1954.  
11 p. (Massovaia radiobiblioteka, no. 200) [Microfilm] (MLRA 7:11)  
(Radio--Receivers and reception)

OYFA, I.L.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G.,  
redaktor; KULIKOVSKIY, A.A., redaktor; MOZHHEVELOV, B.N., redaktor;  
SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., re-  
daktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I. redaktor; MALININ,  
R.M., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Intercom loud-speaker apparatus] Peregovorno gromkogovoriashchee  
ustroistvo. Moskva, Gos. energ. izd-vo, 1954. 14 p. (Massovaya ra-  
diobiblioteka, no. 202)  
(Loud-speakers) (MIRA 7:11)

*KULIKOVSKIY, A.A.*

STARIKOV, I.G.; SPIZHEVSKIY, I.I., redaktor; TARASOV, F.I., redaktor;  
BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor;  
KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TRAMM, B.F.,  
redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; FRIDKIN,  
A.M., tekhnicheskiy redaktor.

[Television set with few tubes] Malolampovyi televizor. Pod red. L.I.  
Spizhevskogo. Moskva, Gos. energ. izd-vo, 1954. 37 p. (Massovaya  
radiobiblioteka, no.197) [Microfilm]  
(Television) (MLRA 7:12)

NELEPETS, V.S.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G.,  
redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZEVELOV, B.N., redaktor;  
SMIRNOV, A.D., redaktor; TARASOV, Y.I., redaktor; TRAMM, B.F.,  
redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor;  
YAKOBSON, A.Kh., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Radio engineering in railroad transportation] Radiotekhnika na  
zheleznyodorozhnom transporte. Moskva, Gos. energ. izd-vo, 1954.  
43 p. (Massovaya radiobiblioteka, no. 196) [Microfilm] (MLRA 7:10)  
(Radio) (Railroads--Electronic equipment)

*KULIKOVSKIY A.A.*  
GOL'DREYER, A.G.; YAKOBSON, A.Kh., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.O., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHECHEVLOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TATARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMMUR, V.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Feedback electronic cascades] Lampovyj kaskad s obratnoj sviaz'ju. Moskva, Gos. energeticheskoe izd-vo, 1954. 86 p. (Massovaia radio-biblioteka, no. 201)  
(Amplifiers, Electron tube) (MLRA 7:11)

SUTYAGIN, V.Ya.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G.,  
redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor;  
SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.P., redaktor;  
CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; KRIVOSHEYEV, I.I.,  
redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Circuits of television receiver scanning devices] Skhemy razverty-  
vaiushchikh ustroistv televisionnykh priemnikov. Moskva, Gos. energ.  
izd-vo, 1954. 93 p. (Massovaia radiobiblioteka, no. 199) (MLRA 7:9)  
(Television--Receivers and reception)

PLONSKIY, A.F.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHASHMUR, V.I., redaktor; SENCHENKOV, A.F., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor

[Quartz resonators] Kvartsevye rezonatory. Moskva, Gos. energ. izd-vo, 1954. 94 p. [Microfilm] (MLRA 7:10)  
(Electric resonators)

BYALIK, Gavriil Iosifovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor;  
YELIN, O.G., redaktor; KULIKOVSKIY, A., redaktor; MOZHZHEVELOV, B.N.,  
redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM,  
B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor;  
KRIVOSHEYEV, M.I., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor

[The technique of television transmission] Tekhnika televizionnykh  
peredach. Moskva, Gos. energ. izd-vo, 1954. 96 p. (Massovaia radio-  
biblioteka, no.205) (MIRA 8:3)  
(Television-Transmitters and transmission)

LEVITIN, Yefim Alekseyevich; KURARKIN, L.V., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIENOV, A.D., redaktor; ZABASOV, F.I., redaktor; TRAMM, B.P., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Electron tubes] Elektronnye lampy. Pod red. L.V.Kubarkina. Moskva, Gos.energ. izd-vo, 1954. 101 p. (Massovaya radiobiblioteka, no.209)

[Microfilm] (MIRA 8:2)

(Electron tubes)

LOGINOV, V.N., Viktor Nikolayevich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY ~~A.A.~~, redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHENCHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; VAYNSHTEYN, S.S., redaktor; VORONIN, K.P., tekhnicheskij redaktor

[Radio measurements] Radioizmereniia. Moskva, Gos. energ. izd-vo, 1954. 119 p. (Massovaia radiobiblioteka, no.208) (MIRA 8:3)  
(Radio measurements)

PRESMAN, Aleksandr Samoilovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, T.I., redaktor; TEAMM, B.F., redaktor; CHECHIK, I.O., redaktor; SHAMSHUB, V.I., redaktor; KONASHINSKIY, A.D., redaktor; LARIONOV, G.Ye., tekhnicheskij redaktor.

[Centimeter waves] Santimetrovye volny. Moskva, Gos. energ. izd-vo, 1954. 119 p. (Massovaia radiobiblioteka, no. 203) [Microfilm]  
(Radio waves) (MIRA 7:11)

KULIKOVSKIY, A.A.

YEL' YASHKEVICH, Samuil Abramovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; NIKOLAYEVSKIY, I.F., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor

[Eliminating defects from television receivers] Ustranenie neispravnostei v televizore, Moskva, Gos. energ. izd-vo, 1954. 151 p. (Massovaya radiobiblioteka, no.211) (MIRA 8:3)  
(Television—Repairing)

KULIKOVSKIY, A.A.; SUTYAGIN, V.Ya., redaktor; FRIDKIN, A.M., tekhnicheskiy  
redaktor

[New developments in amateur radio receivers] Novoe v tekhnike  
liubitel'skogo radiopriema. 2-e izd., perer. Moskva, Gos. energeti-  
cheskoe izd-vo, 1954. 174 p. (Massovaya radiobiblioteka, no.207)  
(MLRA 8:3)

[Microfilm]  
(Radio- Receivers and reception)

SHAMSHUR, Vladimir Ivanovich; KULIKOVSKIY, A.A., redaktor; FRIDKIN, A.M.,  
tekhnicheskiy redaktor.

[First years of Soviet radio engineering and amateur radio work]  
Pervye gody sovetskoi radiotekhniki i radioliubitel'stva. Moskva,  
Gos. energ. izd-vo, 1954. 247 p. (Massovaia radiobiblioteka, no. 213)  
[Microfilm]  
(Radio)

285247

STEPANOV, Sergey; KORNDORF, S.F., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S..  
redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHENELOV,  
B.N., redaktor SMIRNOV, A.D., redaktor; TAKHOOV, V.I., redaktor; TRAMN,  
B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, B.I., redaktor;  
VORONIN, K.P., tekhnicheskiy redaktor

[Calculations for measuring instruments] Raschet izmeritel'nykh priborov.  
Moskva, Gos. energeticheskoe izd-vo, 1955. 30 p. (Massovaia radiobiblio-  
teka, no.215) [Microfilm] (MLRA 8:2)  
(Measuring instruments)

GOL'DREYER, Iona Gutelevich; ROGINSKIY, Vladimir Yur'yevich; BERG, A.I.,  
redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOV-  
SKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D.,  
redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK,  
P.O., redaktor; SHAMSHUR, V.I., redaktor; LEVITIN, Ye.A., redaktor;  
VORONIN, K.P., tekhnicheskiy redaktor

[Self-righting amplifier systems] Samovypramliaiushchie usilitel'-  
nye skhemy. Moskva, Gos.energ.izd-vo, 1955. 46 p. (MIRA 9:3)  
(Amplifiers, Electron-tube)

KULIKOVSKIY, N. A.

ROGINSKIY, Vladimir Yur'yevich; FEYGEL'S, Viktor Zinov'yevich; BERG, A. I.,  
redaktor; DZHIGIT, I. S., redaktor; YKLIN, O. G., redaktor; KULIKOVSKIY,  
A. A., redaktor; MOZHZHEVYLOV, B. N., redaktor; SMIRNOV, A. D., redaktor;  
TAKSOV, F. I., redaktor; TRAMM, B. F., redaktor; CHECHIK, P. O., redaktor;  
SHAMSHUR, V. I., redaktor; KUBARKIN, L. V., redaktor; LARIONOV, G. Ye.,  
tekhnicheskiy redaktor

[From microphone to loudspeaker] Ot mikrofona do gromkogovoritelia.  
Moskva, Gos. energ. izd-vo, 1955. 63 p. (Massovaia radiobiblioteka,  
no. 233)

(MLRA 9:2)

(Radio)

LEVITIN, A. H.

LEVITIN, Yefim Alekseyevich; KONASHINSKIY, D.A., redaktor; BERG, A.I.,  
redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor;  
KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor;  
SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F.,  
redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor.  
VORONIN, K.P., tekhnicheskiy redaktor.

[Tuning of radio receivers] Nalashivanie priemnikov. 2-e izd.,  
perer. Moskva, Gos. energ. izd-vo, 1955. 87 p. (Massovaia  
radiobiblioteka, no. 225) (MIRA 9:2)

(Radio -- Receivers and reception)

FEDOTOV, Yakov Andreyevich; KULIKOVSKIY, A.A., redaktor; BERG, A.I.,  
redaktor; DZHIGIT I.S., redaktor; YELIN, O.G., redaktor; MOZH-  
ZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I.,  
redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor;  
SHASHMUR, V.I., redaktor.; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Crystal triodes] Kristallicheskie triody. Moskva, Gos.energ.  
izd-vo, 1955. 94 p. (Massovaia radiobiblioteka no.216)  
(Electron tubes) (MLRA 8:9)

KULIKOVSKIY, N. A.

CHECHIK, Nikolay Oskarovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHIZHEVLOV, B.M. redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM B.P. redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; ZHIGAREV, A.A., redaktor; VORONIN, K.P., tekhnicheskij redaktor.

[Photoelectric cells and their use] Fotoelementy i ikh primenie  
Moskva, Gos.energ.izd-vo, 1955. 111 p. (Massovaia radiobiblioteka  
no.228)

(MLRA 8:11)

(Photoelectric cells)

SHADOV,R.; CHECHIK,P.O.[translator]; BERG,A.I., redaktor; DZHIGIT,I.S., redaktor; YELIN,O.G., redaktor; KULIKOVSKIY,A.A., redaktor; MOZH-ZHEVLOV,B.N., redaktor; SMIRNOV,A.D., redaktor; TARASOV,F.I., redaktor; TRAMM,B.F., redaktor; SHAMSHUR,V.I., redaktor; LIVITIN, Ye.A., redaktor; VORONIN,K.P., tekhnicheskij redaktor

[Testing apparatus for repairing radio receivers. Translated from the German] Ispytatel'naia apparatura dlia remonta priemnikov. Perer.perevod s nemetskogo P.O.Chechika. Moskva, Gos.energ.izd-vo 1955. 125 p. (Massovaia radiobiblioteka, no.232) (MLRA 9:3) (Radio--Receivers and reception)

KULIKOVSKIY, A.A.

SOMINSKIY, Monas Samuilovich; BROYDE, A.M., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHENELOV, B.N., redaktor; SMIRNOV, M.D., redaktor; RASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; LARIONOV, G.E., tekhnicheskiy redaktor

[Semiconductors and their use] Poluprovodniki i ikh primenenie. Moskva, Gos.energ. izd-vo, 1955. 127 p. (Massovaia radiobiblioteka, no.236)

(Semiconductors)

(MLRA 9:2)

MAULIKOVSKIY, A.A.

MAZEL', Klimentiy Borisovich; BROYDE, A.M., redaktor; BERG, A.I.,  
redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULI-  
KOVSKIY, A.A., redaktor; MOZHZHNEVLOV, B.N., redaktor;  
SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F.,  
redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor;  
SKVORTSOV, I.M., tekhnicheskiy redaktor

[Voltage and current stabilizers] Stabilizatory napriazheniya i  
toka. Moskva, Gos.energ.izd-vo, 1955. 133 p. (Massovaiia radio-  
biblioteda, no.218)

(Voltage regulators)

(MLRA 8:9)

KULIKOVSKIY, H. A.

ROZENBLATT, Moisey Aronovich; BERG, A.I., redaktor; DZHIGIT, I.S.,  
redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor;  
MOZHZHDEVLOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV,  
F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor;  
SHAMSHUR, V.I., redaktor; SEMCHEKOV, A.F., redaktor; VORONIN,  
K.P., tekhnicheskiy redaktor.

[Magnetic amplifiers] Magnitnye usiliteli. Moskva, Gos.energ.  
izd-vo, 1955. 135 p. (Massovaia radiobiblioteka, no.230)  
(Magnetic amplifiers) (MLRA 8:11)

VOLIN, M.L.; ~~KULIKOVSKIY, A.A.~~, redaktor; SKVORTSOV, I.M., tekhnicheskiy  
redaktor.

[Intermediate-frequency amplifiers] Uziliteli promezhutochnoi  
chastoty. Izd. 2-e, perer. Moskva, Gos.energ.izd-vo, 1955.  
177 p.

(Amplifiers, Electron-tube)

(MLRA 8:3)

KULIKOVSKIY, A.A.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor;  
YELIN, O.G., redaktor; MOSHEZHEVELOV, G.N., redaktor; SMIRNOV,  
A.D., redaktor; TARASOV, A.D., redaktor; TRAMM, B.F., redaktor;  
CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; ZHUKHOVIT-  
SKIY, B. Ya., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Manual for the amateur radio operator] Spravochnik radioliubi-  
telia. Moskva, Gos.energ.izd-vo, 1955. 256 p. (Massovaya radio-  
biblioteka, no.222)  
(Radio-Amateur's manuals) (MLRA 8:9)

BORISOV, Viktor Gavrilovich; BERG, A.I.; DZHIGIT, I.S.; VELIN, O.G.,  
KULIKOVSKIY, A.A.; MOZHZHEVELOV, B.N.; SMIRNOV, A.D.; TARASOV,  
F.I.; THANN, B.I.; CHECHIK, P.O.; SHAMSHUR, V.I.; MALIMIN, R.M.  
redaktor; VORONIN, K.P., tekhnicheskij redaktor

[Young radio amateur] Iunyi radioliubitel'. Izd. 2-oe, ispr. 1  
dop. Moskva, Gos.energ.izd-vo 1955. 271 p. (Massovaja radio-  
biblioteka, no.224) (MLRA 8:11)  
(Radio-Amateurs' manuals)

KULIKOVSKIY - Circuit Theory  
KULIKOVSKIY, A. N.  
Pub. 50-37

FD-2495

Title : Kolikovskiy, A. N., Active Member, VNIPIE  
Periodical : ~~Establishment~~ processes during detection of pulse signals  
Abstract : Radiotekhnika, No. 21-28, Jun 55  
: Method of calculating the steady-state pulse-signal voltage on the load of a detector, with the aid of Buharov's integral, for the condition of a slowly changing dc component, are presented in this article. A convenient integration method is offered for determination of the dc component of the detector current for a linear segmental approximation of the detector current characteristic. With the aid of this method simple expressions are found for the steady-state voltages at the plate, diode and cathode of detectors in the detection of pulses with rectangular envelopes. Application of the derived formulas for establishment of the conditions for detection of pulses having envelopes of other forms are explained.  
Institution : All-Union Scientific and Technical Society of Radio (VNIPIE) Engineering and Electric Communications imeni A. Popov  
Submitted : November 16, 1954

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RIZKIN, Yefim Aranovich; BERG, A.I.; redakter; DZHIGIT, I.S., redakter; KULIKOVSKIY, A.A., redakter; SMIRNOV, A.D., redakter; TARASOV, F.I., redakter; TRAMM, B.F., redakter; CHECHIK, P.O., redakter; SHAMSHUR, V.I., redakter; KONASHINSKIY, D.A., redakter; VORONIN, K.P., tekhnicheskiy redaktor.

[How to build a collective farm broadcasting studio] Kak postroit' kolkhoznuiu rechevuiu studiu. Moskva, Gos.energ. izd-vo, 1956. 14 p.  
(Massovaia radiobiblioteka, no.239).  
(Radio stations) (Radio in agriculture) (MLRA 9:6)

BARSUKOV, Filipp Ivanovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor;  
KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I.,  
redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR,  
V.I., redaktor; TARASOV, F.I., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor.

[Three-tube radio receiver] Trekhlampovyj radiopriemnik. Moskva,  
Gos. energ. izd-vo, 1956. 15 p. (Massovaia radiobiblioteka no.238)  
(Radio--Receivers and reception) (MLRA 9:6)

*chechik, petr oskarovich; berg, a.i., redaktor; dzhigit, i.s., redaktor  
kulikovskiy, a.a., redaktor; smirnov, a.d., redaktor tramm, b.f.,  
redaktor; shamshur, v.i., redaktor; tarasov, f.i., redaktor; voronin,  
k.p., tekhnicheskiy redaktor*

[New sources of current for radio apparatus] Novye istochniki pitanija  
radioapparatury. Moskva, Gos. energ. izd-vo, 1956. 39 p. (Massovaja  
radiobiblioteka, no.257) (MLRA 10:5)  
(Radio-Apparatus and supplies) (Electric batteries)

GONCHARSKIY, Lush Abramovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor;  
KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I.,  
redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR,  
V.I., redaktor; FROYMAN, A.I., redaktor; LARIONOV, G.Ye., tekhnicheskiy  
redaktor

[Electron tubes with mechanical controls] Elektronnaia lampa s  
mekhanicheskim upravleniem. Moskva, Gos.energ. izd-vo 1956. 39 p.  
(Massovaya radiobiblioteka, no.243) (MIRA 9:8)  
(Electron tubes)

АЛИКOVSKIY, А.А.

ZAGIK, Semen Yefimovich; KAPCHINSKIY, Lev, Mikhaylovich; BERG, A.I.,  
redaktor; DZHIGIT, I.S., redaktor; JULIKOVSKIY, A.A., redaktor;  
SMIRNOV, A.D., redaktor; TARASOV, P.I., redaktor; TIKHM, B.F., redaktor;  
CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; OVCHARENKO, Ye.  
P., redaktor; VORONIN, K.P., tekhnicheskij redaktor

[Television reception antennas] Priemnye televizionnye antenny.  
Moskva, Gos. energ. izd-vo, 1956. 47 p. (MLRA 10:4)  
(Television--Antennas)

Kulikovskiy, A.A.

MIKHLIN, Berka Zys'yevich; HERG, A.I.,redaktor; DZHIGIT, I.S.,redaktor;  
KULIKOVSKIY, A.A.,redaktor; SMIRNOV, A.D.,redaktor; TARASOV, F.I.,  
redaktor; TRAMM, B.F.,redaktor; CHECHIK, P.O.,redaktor;  
SHAMSHUR, V.I.,redaktor; GINZBURG, Z.B.,redaktor; CHERNOV, V.S.,  
tekhnicheskiy redaktor

[Electronic instruments for production control] Radioelektronnye  
pribory dlja proizvodstvennogo kontrolia. Moskva, Gos. energ.  
izd-vo, 1956. 62 p. (Massovaia radiobiblioteka, no.258)  
(Automatic control) (Electronic instruments)  
(Production control)

KUBARKIN, L. N.

KUBARKIN, Leontiy Vladimirovich; BERG, A.I.,redaktor; DZHIGIT, I.S.,redaktor;  
KULIKOVSKIY, A.A.,redaktor; SMIRNOV, A.D.,redaktor; TARASOV, F.I.,  
redaktor; TRAMM, B.P.,redaktor; CHECHIK, P.O.,redaktor; SHAMSHUR, V.I.  
redaktor; GINZBURG, Z.B.,redaktor; LARIONOV, G.Ye.,tekhnicheskiy redaktor

[Radio circuit primer] Azbuka radioskhem. Moskva, Gos. energ. izd-vo,  
1956. 63 p. (Massovaya radiobiblioteka, no.259) (MLRA 10:5)  
(Radio circuits)

CHUL'GIN, Konstantin Aleksandrovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; MEL'NIKOVSKAYA, R.D., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor.

[How a radio receiver works] Kak rabotaet radiopriemnik. Moskva, Ges. energ. izd-vo, 1956. 78 p. (Masssovaia radiobiblioteka, no.242)  
(Radio--Receivers and reception)

BYALIK, Gavriil Iosifovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor;  
KULIKOVSKIY, A.A., redaktor; SWIRNOV, A.D., redaktor; TARABOV, F.I.,  
redaktor; TRAMM, B.Y., redaktor; CHENCHIK, P.O., redaktor; SHAMSHUR,  
V.I., redaktor; KRIVOSHNEYEV, M.I., redaktor; SKVORTSOV, I.N., te-  
knicheskiy redaktor.

[Broad-band amplifiers] Shirekopelesnye usiliteli. Izd. 2-ee, perer.  
Moskva, Gos. energ. izd-vo, 1956. 110 p. (Massovaya radiobiblioteka  
no.240) (Amplifiers, Electron-tube) (MLRA 9:5)

KUBARKIN, Leontiy Vladimirovich; LEVITIN, Yefim Alekseyevich; KULIKOVSKIY,  
A.A., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[Radio engineering made interesting] Zanimatel'naia radiotekhnika.  
Moskva, Gos. energ. izd-vo, 1956. 263 p. (Massovaya radiobiblioteka,  
no.249) (Radio) (MIRA 9:11)

KULIKOVSKIY, Aleksandr Aleksandrovich; BOLOSHIN, Igor' Aleksandrovich;  
POTRYASAY, Vladimir Filippovich; AKALUNIN, S.A., redaktor; CHEZNOV,  
V.S., tekhnicheskiy redaktor

[Principles in teaching radio receiver design] Osnovy uchebnogo  
proektirovaniia radiopriemnikov. Pod obshchei red. A.A.Kulikovskogo.  
Moskva, Gos. energ. izd-vo, 1956. 327 p. (MIRA 10:1)  
(Radio--Receivers and reception)

ΑΟΛΙΚΟΥΣΚΑΙ, Η.Η.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1312  
AUTHOR KULIKOWSKIJ, A.A.  
TITLE The Transitron Generator as a Device with Back-Coupling.  
PERIODICAL Radiotekhnika, 11, fasc. 8, 71-73 (1956)  
Issued: 9 / 1956 reviewed: 10 / 1956

The basic characteristic of the pentode in connection with transitron operation is a curve which represents the dependence of the current of the second grid on the voltage of the third grid. In the case of a reduced anode voltage this characteristic has a declining branch which is utilized in the transitron schemes.

In the case of such an operation, the points: third grid - cathode are counted as tube "input" which has the control voltage. As "output", where the control current flows, the points are: second grid - cathode. An equivalent scheme of the tube for transitron operation may take the form of an active four-pole with a current generator. The results obtained will differ from those obtained with an ordinary tube used in the same way mainly by the negative rise and, to a small extent, by other values of interelectrode conductivities. The transitron scheme with a common third grid and also with a common second grid must have a negative initial conductivity. This makes it possible to construct autogenerators which utilize negative conductivities.

The most wide-spread are transitron generators with a common cathode and an artificially fitted exterior back-coupling by which the tube receives a negative

*KULIKOVSKIY, A.A.*

Category : USSR / Radio Physics, General Problems.

I-1

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 7225

Author : Kulikovskiy, A.A.

Title : Use of Harmonics for the Calculation of the Envelopes of Curves.  
(Author's own abstract).

Orig Pub : Radiotekhnika, 1956, 11, No 9, 72-74

Abstract : The author considers the response of a four-terminal network, consisting of a tank circuit in the anode circuit followed by linear stages (the tuned circuit in the anode circuit of a nonlinear tuned amplifier) to a high frequency pulse, in which the waveform of the "filling" oscillations is very far from sinusoidal owing to the nonlinear mode of operation of the preceding tube.

A relation is obtained between the time variation of the voltage at the output of the four-terminal network and the slowly varying envelope of the first harmonic of the Fourier expansion of the current in the plate circuit in the interval  $(x, x+T_0)$ , where  $T_0$  is the period of the resonant frequency of the four-terminal network.

Card : 1/1

- 2 -

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redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor;  
TARASOV, F.I., redaktor. TRAMM, B.F., redaktor; CHECHIK, M.O.,  
redaktor; SHAMSHUR, V.I., redaktor; TARASOV, F.I., redaktor;  
VORONIN, K.P., tekhnicheskiy redaktor.

[Pocket transceivers] Karmannye radiostantsii. Moskva, Gos.energ.  
izd-vo, 1957. 31 p. (Massovaia radiobiblioteka, no.267)

(MLRA 10:6)  
(Radio--Apparatus and supplies)

TARASOV, F.I.; HERG, A.I.,redaktor; DZHIGIT, I.S.,redaktor; KULIKOVSKIY,  
A.A.,redaktor; SMIRNOV, A.D.,redaktor; TARASOV, F.I.,redaktor;  
TRAMM, B.F.,redaktor; CHECHIK, P.O.,redaktor; SHAMSHUR, V.I.,  
redaktor; YENYUMIN, V.V.,redaktor; MEDVEDEV, L.Ya.,  
tekhnicheskiy redaktor

[Diagrams of low-frequency amplifiers for amateurs] Skhemy  
radioliubitel'skikh usiliteli nizkoi chastoty. Moskva, Gos.  
energ. izd-vo, 1957. 61 p. (Massovaya radiobiblioteka, no. 264)

(Amplifiers, Electron-tube)

(MLRA 10:4)

KAZARYAN, Rafael' Avetisovich; KUVSHINOV, Boris Ivanovich; NAZAROV,  
Mikhail Vasil'yevich, BERG, A.I., redaktor; DZHIGIT, I.S., redaktor;  
KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor;  
TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor;  
SHAMSHUR, V.I., redaktor; KHARKEVICH, A.A., redaktor; MEDVEDEV,  
L. Ya., tekhnicheskiy redaktor

[Elements of the general theory of communications] Elementy  
obshchei teorii sviazi. Moskva, Gos. energ. izd-vo, 1957.  
94 p. (Massovaya radiobiblioteka, no.263)  
(Telecommunication) (MLRA 10:4)

LEVANDOVSKIY, Boris Andreyevich; BERG, A.I., red.; DZHIGIT, I.S., red.;  
KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.;  
TRAMM, B.P., red.; CHECHIK, P.O., red.; SHAMSHUR, V.I., red.;  
SOBOLEVSKIY, A.G., red.; CHERNOV, V.S., tekhn.red.

[Portable ultrashort wave radio station] Perenosnaya UKV radio-  
stantsiya. Moskva, Gos.energ.izd-vo, 1957. 31 p. (Massovaya  
radiobiblioteka, no.278) (MIRA 10:11)  
(Radio--Receivers and reception) (Radio--Transmitters and transmission)

YAKOVLEV, Valeriy Vladimirovich; BERG, A.I., redaktor; DZHIGIT, I.S.,  
redaktor; ~~KUDRYAVCEV, A.A.~~, redaktor; SMIRNOV, A.D., redaktor;  
TARASOV, P.I., redaktor; CHECHIK, P.O., redaktor, SHAMSHUR, V.I.,  
redaktor; PIANKIN, Yu.N., redaktor; MEDVEDEV, L.M., tekhnicheskij  
redaktor.

[Amateurs' receiving sets using transistors] Liubitel'skie priemniki  
na poluprovodnikovykh triodakh. Moskva, Gos.energ.izd-vo, 1957. 39 p.  
(Massovaya radiobiblioteka, no.275) (MIRA 10:11)  
(Radio--Receiver and reception) (Transistors)

Библиотека А.А.

GRUDINSKAYA, Galina Petrovna; HERG, A.I., red.; DZHIGIT, I.S., red.;  
KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.;  
CHECHIK, P.O., red.; SHAMSHUR, V.I., red.; LARIONOV, G.Ye., tekhn.red.

[Ultra-short radio wave propagation] Rasprostranenie ul'trakorotkikh  
radiovoln. Moskva, Gos.energ.izd-vo, 1957. 62 p. (Massovaya radio-  
biblioteka, no.281)

(MIRA 10:12)

(Radio, Shortwave)

BROYDE, Abram Markovich, ; TARASOV, F.I., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor. KULIKOVSKIY, A.A. redaktor; SMIRNOV, A.D., redaktor, ; TRAMM, V.F., redaktor, ; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Handbook on electron tube and semiconductor apparatus] Spravochnik po elektrovakuumnym i poluprovodnikovym priboram. Moskva, Gos.energ.izd-vo, 1957. 175 p. (Massovaja radiobiblioteka, no.269) (MLRA 10:5)  
("electronic apparatus and appliances")

ANDREYEV, Igor' Vasil'yevich, BERG, A. I., red.; BURLYAK, V. A., red.;  
VANZYEV, V. I., red.; GENISETA, Ye. N., red.; DZHIVIT, I. S., red.;  
KANAYEVA, A. M., red.; KICHKUL', B. T., red.; KULIKOVSKII, A. A., red.;  
SMIRNOV, A. D., red.; TABASOV, F. I., red.; CHECHIK, P. O., red.; SHAMSHUR,  
V. I., red.; GANZBURG, M. D., red.; MEDVEDEV, L. N., red.;  
TEKHNIK, red.

[Cabinet designs for radio receivers] Vneshnie oformlenie priemnika.  
Moskva, Gos. energ. izd-vo, 1958. 46 p. (MIRA 11:8)  
(Radio--Receivers and reception)

*KULIKOVSKIY A.A.*

KUGUSHEV, Aleksandr Mikhaylovich; BERG, A.I., red.; BURDEYNYY, F.I., red.;  
BURLYAND, V.A., red.; VANEEV, V.I., red.; GENISHTA, Ye.N., red.;  
DZHIGIT, I.S., red.; KANAYEVA, A.M., red.; KRENKEL', E.T., red.;  
KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.;  
CHECHIK, P.O., red.; SHAMSHUR, V.I., red.; BORUNOV, N.I., tekhn. red.

[Modern radio electronics] Sovremennaja radioelektronika. Moskva,  
Gos. energ. izd-vo, 1958. 62 p. (Massovaja radiobiblioteka, no. 300).

(Electronics)

(MIRA 11:11)

MEERSON, Anatoliy Meyerovich, BERG, A.I., red.; BURGLYAND, V.A., red.;  
VANEYEV, V.I., red.; GENISHKA, Ye.N., red.; DZHIGIT, I.S., red.;  
KANAYEVA, A.M., red.; KREKHTEL', E.T., red.; KULIKOVSKIY, A.A., red.;  
SMIRNOV, A.D., red.; TARASOV, F.I., red.; CHECHIK, P.O., red. [deceased]  
SHAMSHUR, V.I., red.; BORUNOV, N.I., tekhn.red.

[Testing radio tubes] Ispytanie radiolamp. Moskva, Gos. energ.  
izd-vo, 1958. 61 p. (Massovaya radiobiblioteka, no.303) (MIRA 11:9)  
(Electron tubes--Testing)

SOBOLEVSKIY, Anatolii Georgiyevich.; BERG, A.I., red.; BURLYAND, V.A., red.;  
VANEYEV, V.I., red.; GENISHTA, Ye.N., red.; DZHIGIT, I.S., red.;  
KANAYEVA, A.M., red.; KRENKEL', E.T., red.; KULIKOVSKIY, A.A., red.;  
SMIRNOV, A.D., red.; TARASOV, F.I., red.; SHAMSHUR, V.I., red.;  
KRIBITSKIY, B.Kh., red.; LARIONOV, G.Ye., tekhn. red.

[Pulse techniques] Impul'snaiia tekhnika. Moskva, Gos. energ. izd-vo,  
1958. 167. (Massovaiia radiobiblioteka, no. 308). (MIRA 11:11)  
(Pulse techniques(Electronics))

PHASE I BOOK EXPLOITATION 804

Kulikovskiy, Aleksandr Aleksandrovich

Lineynyye kaskady radiopriyemikov (Linear Stages of Radio Receivers)  
Moscow, Gosenergoizdat, 1958. 350 p. 10,000 copies printed.

Ed.: Akalunin, S.A.; Tech. Ed.: Fridkin, A.M.

PURPOSE: This book is intended for students of vtuzes and  
tekhnikums and may be useful to specialists working in the field  
of radio reception.

COVERAGE: The book presents general information on radio receivers,  
basic types of block diagrams, resonance circuits, antenna feeder  
systems, input units, RF amplifiers, set noises and real sensitivity  
of radio receivers, transistor amplifiers, IF amplifiers, signal  
distortion and transients in the RF section of a receiver. The  
description of special properties of microwave receivers is closely

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Linear Stages of Radio Receivers 804

connected with similar problems of longwave reception. The author states that the existing literature has not treated these questions in sufficient detail while in many cases the methods of technical calculation have not been developed. Serious difficulties exist due to the fact that many related problems in this field have been treated by means of different presentations and methods. This book offers a systematic description of the theory and calculation of RF linear components of radio receivers. Apart from questions not previously covered in similar works on the subject, the book contains some original material. The author thanks Professors N.M.Izyumov and N.I. Chistyakov for their help in preparing the book. There are 42 references of which 25 are Soviet and 17 English.

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KULIKOVSKIY, A.A., red.; YENYUTIN, V.V., red.; TARASOV, F.I., red.;  
FRIDKIN, A.M., tekhn.red.

[Handbook for radio amateurs] Spravochnik radioliubitelia.  
Izd. 2-oe. Moskva, Gos. energ. izd-vo, 1958. 480 p. (Massovaya  
radiobiblioteka, no.286) (MIRA 11:5)  
(Radio--Amateurs' manuals)

Filipov, A.G.

9(4) 24(6) p 4

PAGE 1 BOOK EXPLOITATION

807/765

Vsesoyuznoye nauchno-tekhnicheskoye obshchestvo radioelektronika i elektronika

Poluprovodnikovaya elektronika (Semiconductor Electronics) Moscow, 1959. 222 p. 13,950 copies printed.

Ed.: V.I. Shashabur, Tech. Ed.: K.P. Vorozin.

PURPOSE: The book is intended for engineering and technical personnel working with semiconductor devices.

CONTENT: The book is a collection of lectures delivered at the All-Union Seminar on Semiconductor Electronics in March 1957. The seminar was organized by the Scientific and Technical Society of Radio Engineering and Electrical Communications in April A.S. Popov. The authors of the lectures have attempted to summarize the basic information on the operation of semiconductor devices. The articles describe the operation and characteristics of crystal diodes and transistors and discuss their application in various low-frequency transistors and pulse circuits. No personalities are mentioned. References appear at the end of each article. Card 1/7

A.A. Balakirev. High-frequency Transistor Amplifiers 152

The author discusses equivalent circuits of high-frequency transistor amplifiers and describes methods of calculating their parameters. He describes the operation of inverting resonant circuits. He also discusses the effect of feedback in transistor circuits. He also discusses transistor stability, stabilizing networks for the internal feedback in transistor circuits, and the voltage factor. There are 15 references of which 3 are Soviet, 1 German and 11 English. Card 1/7

T.N. Arshanyan. Transient and Frequency-Phase Characteristics of Junction-type Triode Transistor 173

The author discusses transient, frequency and phase characteristics of junction-type triode transistors. He also derives equations for transfer functions for various types of transistor connections and describes the equivalent circuits for high frequencies for a junction-type triode transistor. There are 6 references of which 2 are Soviet (including 1 translation), and 6 English.

T.N. Apakyan. Triode Transistor Video Amplifiers 187

The author discusses linear and nonlinear distortions in transistor video amplifiers and describes circuits with complex feedback and current distributing networks. A brief discussion of multistage amplifiers is also presented. There are 2 references, both Soviet.

B.N. Koncov. Trigger and Relaxation Circuits Using Junction-type Triode Transistors 197

The author describes the operation and characteristics of symmetrical triggers and multivibrators using junction-type transistors. He also discusses their stability and derives expressions for calculating transistor circuit performance. There are 3 references of which 3 are Soviet and 1 English.

AUTHOR: Kulikovskiy, A.A.

30V/106-58-9-12/17

TITLE: The Parameters of a Detector Using a Semiconductor Diode  
(Parametry detektora s poluprovodnikovym diodom)

PERIODICAL: Elektrosvyaz', 1958, Nr 9, pp 71 - 73 (USSR)

ABSTRACT: It is usual in the analysis of semiconductor diodes to assume that the voltage/current characteristic is exponential. For real diodes this is only true in the small-signal region and for large signals the 2-straight-line representation of Fig 1 is more suitable. The present note evaluates the transfer coefficient and input conductance of a detector whose reverse conduction is appreciable. The expression for the current taken by the detector involves a function of cut-off angle, B. The exact variation with operating point of the detector is that of Fig 2 and it will be seen that it also may be well represented by 2 straight lines. The transfer coefficient of the detector is  $K_b$  and immediately below this the analogous expression for a vacuum diode is given. In the analysis of input conductance a quantity A is similarly represented by 2 straight lines as in Fig 3. The exact

Card 1/2

SOV/106-58-9-12/17

The Parameters of a Detector using a Semiconductor Diode

expression for input conductance is  $G_{VX}$ . A good practical approximation to input resistance is the formula for  $R_{VX}$  which demonstrates that even when the load resistance is infinite the input resistance can never exceed 1/3 the inverse resistance of the diode. It is suggested that diodes with a high inverse resistance would be chosen for narrow-band receivers, where circuit damping is to be least and that for wide-band receivers a diode with small forward resistance would be preferred so as to give as large a transfer coefficient as possible.

There are 3 figures and 2 references, both Soviet.

SUBMITTED: December 17, 1957

Card 2/2

05212  
SOV/142-2-3-20/27

9(2,3)

AUTHORS: Kulikovskiy, A.A., Potryasay, V.F., Sutyagin, V.Ya., Ryzhkov, A.S.

TITLE: The Terminology in the Field of Transistor Electronics

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 3, p 378 (USSR)

ABSTRACT: The authors refer to the article by T.M. Agakhanyan, B.N. Kononov and I.P. Stepanenko, titled "The Terminology in the Field of Transistor Electronics", published in Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1958, Vol 1, Nr 4. The authors agree in principle with the suggestions made in the aforementioned article and present some of their own ideas as an addition. For example the Russian terms "baza" (base) and "tranzistor" (transistor) should be sanctioned, although there might be some conflict with the term "poluprovodnikovyy diod" (semiconductor diode) which also belongs to the transistor class. The authors regard the terms "dyrochnyy tranzistor" ('hole' transistor) and "elektronnyy tranzistor" ('electron' transistor) as superfluous and recommend the designation p-n-p or n-p-n transistor. Similar suggestions were made for the classification of diode types.

Card 1/2

05212  
SOV/142-2-3-20/27

The Terminology in the Field of Transistor Electronics

ASSOCIATION: Vojenno-vozdushnaya inzhenernaya Akademiya imeni professora N.Ye. Zhukovskogo (Air Force Engineering Academy imeni Professor N.Ye. Zhukovskiy)

SUBMITTED: February 2, 1959

Card 2/2

AUTHOR: Kulikovskiy, A.A.

SOV/109- --4-3-26/38

TITLE: Analysis of the Transient Phenomena in a Diode Detector,  
Taking into Account the Influence of the Detector Input  
on the Preceding Circuit (Analiz perekhodnykh protsessov  
v diodnom detektore s uchetom vliyaniya vkhoda  
detektora na predshesztvuyushchiy kontur)PERIODICAL: Radiotekhnika i Elektronika, Vol 4, Nr 3, 1959,  
pp 510-533 (USSR)ABSTRACT: It is assumed that the detector is connected to an  
amplifier which is terminated with a single-tuned resonant  
circuit and that the load of the detector consists of a  
simple RC circuit. The amplitude of the voltage at the  
tuned circuit is expressed by (Ref 7):

$$U_m(t) = \frac{\omega_0}{2} \int_0^t R(t-x) I_{ml}(x) dx, \quad (1)$$

where  $I_{ml}(x)$  is the envelope of the first harmonic of  
the anode current passing through the circuit, while  $R(t)$   
is the amplitude of the equivalent impedance of the  
circuit. The amplitude is expressed by Eq (5) where  $B$

Card 1/2

S 0V/109--4-3-26/38

Analysis of the Transient Phenomena in a Diode Detector, Taking into  
Account the Influence of the Detector Input on the Preceding  
Circuit

is defined by Eq (2);  $\rho = R_{kd}$  is the characteristic  
quantity of the circuit. The amplitude of the envelope  
is given by Eq (6) where  $S$  is the slope of the diode,  
 $U_o$  is the voltage at the output of the detector,  $mU_m$   
is the input voltage of the detector and  $S_n$  is the  
slope of the amplifying tube. The voltage across the  
tuned circuit can therefore be written in the form of  
Eq (7). In the differential operatorial form, this can  
be written as Eq (8) from which the voltage at the output  
of the detector is expressed by Eq (10). The solution of  
Eq (10) is in the form of Eq (12).

There are 9 Soviet references.

Card 2/2 SUBMITTED: First submitted June 8, 1957; finally submitted, after  
revision, September 11, 1958

POPOV, Petr Aleksandrovich; BERG, A.I., red.; BURDEYIYY, F.I., red.;  
BURLYAND, V.A., red.; VANEYEV, V.I., red.; OMINISHTA, Ye.N.,  
red.; DZHIGIT, I.S., red.; KAMAYEVA, A.M., red.; KREML',  
E.T., red.; KULIKOVSKIY, A.A., red.; SHIRNOV, A.D., red.;  
TARASOV, F.I., red.; SHAMSUR, V.I., red.; KULIKOVSKIY, A.A.,  
red.; LARIONOV, G.Ye., tekhn. red.

[Design of audio frequency transistor amplifiers] Raschet  
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(MIRA 14:5)  
(Transistor amplifiers)

FEDOTOV, Ya.A., otv.red.; GAL'PERIN, Ye.I., zamestitel' otv.red.; BARKANOV, N.A., red.; BERGEL'SON, I.G., red.; BROYDE, A.M., red.; KAMENETSKIY, Yu.A., red.; KAUSOV, S.F., red.; KIRASILOV, A.V., red.; KULIKOVSKIY, A.A., red.; NIKOLAYEVSKIY, I.F., red.; PENIN, N.A., red.; STEPANENKO, I.P., red.; VOLKOVA, I.M., red.; SVESHNIKOV, A.A., tekhn.red.

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(Transistors) (Electronic circuits)

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BROYDE, A.M., red.; GAL'PERIN, Ye.I., zam.otv.red.; KAMENETSKIY,  
Yu.A., red.; KONEV, Yu.I., red.; KRASILOV, A.V., red.; KULIKOVSKIY,  
A.A., red.; NIKOLAYEVSKIY, I.F., red.; STEPANENKO, I.P., red.;  
VOLKOVA, I.M., red.; SVESHNIKOV, A.A., tekhn.red.

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(MIRA 13:10)  
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FEDOTOV, Ya.A., otv.red.; BARKANOV, N.A., red.; BERGEL'SON, I.G., red.;  
BROYDE, A.M., red.; GAL'PERIN, Ye.I., red.; KAMENETSKIY, Yu.A.,  
red.; KAUSOV, S.P., red.; KOMEV, Yu.I., red.; KRASILOV, A.V.,  
red.; KULIKOVSKIY, A.A., red.; NIKOLAYEVSKIY, I.F., red.;  
STEPANENKO, I.P., red.; VOLKOVA, I.M., red.; SMUROV, B.V.,  
tekhn.red.

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(Electric networks) (Transistors)

FEDOTOV, Ya.A., otv. red.; BERGEL'SON, I.G., red.; GAL'PE.IN, Ye.I.,  
zam. otv. red.; KAMENETSKIY, Yu.A., red.; KAUSOV, S.F., red.;  
KOREV, Yu.I., red.; KRASILOV, A.V., red.; KULIKOVSKIY, A.A.,  
red.; NIKOLAYEVSKIY, I.F., red.; STEPANEJKO, I.P., red.;  
VOLKOVA, I.M., red.; BELYAYEVA, V.V., tekhn. red.

[Semiconductor devices and their applications] Poluprovodnikovye  
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"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927430002-4

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APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927430002-4"

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POPOV, Petr Aleksandrovich; KULIKOVSKIY, A.A., red.

[Design of transistorized audio amplifiers] *Raschet*  
*tranzistornykh usiliteli zvukovoi chastoty.* Izd.2.,  
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Card Tech Sci, Division of Physicomathematical and Technical Sci, Acad Sci Belorussian  
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A.B., inzh.; PETROVNIN, M.I., inzh.; PETROV, I.S., inzh.;  
BOLOTINA, A.V., red.izd-va; MIKHEYEVA, A.A., tekhn. red.

[Inflatable structures] Pnevmaticheskie stroitel'nye kon-  
struktsii. [By] A.B.Gubenko i dr. Moskva, Gosstroizdat,  
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(Air-pressure support)

BARANOV, V.B. (Moskva); KULIKOVSKIY, A.G. (Moskva); LYUBIMOV, G.A. (Moskva)

Boundary layer on a plane plate in anisotropic magnetohydrodynamics.  
Izv. AN SSSR. Mekh.i mashinostr. no.1:141-142 Ja-F '64.  
(MIRA 17:4)

"APPROVED FOR RELEASE: 08/23/2000

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RECORDED BY A. G.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927430002-4"

KULIKOVSKIY, A.G.

20-5-18/60

AUTHOR

KULIKOVSKIY, A.G.,

TITLE

On the Pulsation of Plasma in a Cylinder.  
(K voprosu o pul'satsii plazmennogo shnura - Russian)

PERIODICAL

Doklady Akad.Nauk SSSR, 1957, Vol 114, Nr 5, pp 984-987 (U.S.S.R.)

ABSTRACT

Reference is made to two previous papers dealing with the same subject. The present paper investigates a certain class of rigorous solutions of equations of magnetic hydrodynamics, comprising particularly periodic solutions. The author investigates the onedimensional axially symmetric motions of an unlimited gas with infinite conductivity. First four equations of magnetic hydrodynamics are written down in Lagrange's coordinates. The magnetic lines of force are assumed to be closed concentric circles. An equation describes the acceleration of the particle, the others represent laws of conservation for mass, entropy, and magnetic flux. The present paper finds all solutions with homogeneous deformation, so that  $r/r_0 = \mu(t)$  applies. Here  $\mu$  shall not depend on the coordinate  $r_0$ . The velocity depends linearly on the radius. The solution is then explicitly written down. With  $t = 0$  a concentrated current flows along the symmetry axis. Also for the current distribution at all other points of the space a formula is given. The forms of motion of the plasma which corresponds to the various amounts of the constants and roots occurring in the solution are enumerated in short: clashing, compressing of the gas at one point (at the moment of clashing together the velocity changes with a jerk and a new expansion takes place), flying apart, limita-

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20-5-18/60

On the Pulsation of Plasma in a Cylinder.  
 tion motions, steady equilibrium, non-steady equilibrium, periodic oscillations.  
 The author then investigates a cylinder of finite length and finite radius. In order to be able to describe the phenomenon within the cylinder by means of the obtained solution, it is necessary to fit conductive walls on the front surface, and pressure must be applied to the lateral surface which is equal to the pressure acting from within. A certain voltage must be applied to the ends of the cylinder, which can, however, be easily computed. In conclusion the energy balance is calculated. The solution obtained can easily be generalized for problems with helical magnetic lines of force.

ASSOCIATION Moscow State University.  
PRESENTED BY SEDOV I.L., Member of the Academy  
SUBMITTED 16.1.1957  
AVAILABLE Library of Congress.  
Card 2/2

KULIKOVSKIY, A.O.

Flow of a conducting liquid past magnetized bodies. Dokl. AN SSSR  
117 no. 2:199-202 N '57.  
(MIRA 11:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.  
Predstavлено академиком L.I. Sedovym.  
(Magnetohydrodynamics)

*CLIP*  
KULIKOVSKIY, A. G.: Master Phys-Math Sci (diss) -- "On some new precise solutions of the equations of magnetic hydrodynamics". Moscow, 1958. 6 pp (Moscow State U im M. V. Lomonosov, Mechanical-Math Faculty), 150 copies (KL, No 5, 1959, 142)

A. G. Kulikovskiy

Shorty, I.A.: University Lecturer, and 207/55-55-2-33/35  
 Egorov, V.D.: Scientific Assistant.

Leont'ev - Lectures 1957 at the Technical Mathematical Faculty of Moscow State University (Technicheskaya chitaika 1957 goda na matematicheskom fakultete MGU).

Vestnik Moskovskogo Universiteta. Seriya Matematika, mehanika, astronomskaia, fizika, 1958 - No. 4, p. 241-246 (UDC).

The Leont'ev lecture 1957 took place from October 17 - October 31, 1957 and was dedicated the 40th anniversary of the October revolution.

In the general setting A.S. Kolmogorov, Academician spoke on Approximate Representation of Functions of Several Variables by Superposition of Functions With Less Variables and  $C$ -Entropy of Classes of Functions. The lecture generalizes the results of Kolmogorov, A.G. Vitushkin [7], Arnold and V.M. Tikhonov. The content has been already published [1, 2]. Professor Kha. Sakhnol'shchik (Politicheskii Akademii nauchnyi sekretar', 14/5), Professor Kha. Sakhnol'shchik, Member of the Academy of Sciences of the U.S.S.R., spoke on Investigation of the Boundary Layer of the Motion of a Viscous Compressible Liquid.

The other lectures were given separately in the sections of mechanics and astrophysics. The following lectures were given.

6. I.I. Pavlenko. Lecturer - Generalization of the Theory of the Transverse Shock Against a Flexible Thread.

9. A.G. Culikovskii. Aspirant - Five Around Magnetized Bodies - Compressible Liquid.

10. F.V. Kondratenko. Lecturer - Instruments for the Analysis and Synthesis of Mechanisms.

11. N.S. Len'kii. Lecturer - Some General Laws in the Behavior of Multiply Loaded Metals.

12. V.D. Klyushnikov. Aspirant - A Variant of the Theory of the Influence of Deterioration and Repair on Plastic Stability.

13. Professor M.I. Klinik. and Professor L.A. Lyubarskii - A New Method of the Solution of the Equations of Linear Equations with Small Parameters in the Derivatives.

14. Professor O.A. Oleinik. (Joint Semilinear Partial Differential Equations (Survey of the Results of T.J. Wentzel, Ye. Sh. Slobodin, Yu. N. Kazeninovskaya).

15. Professor K.B. Zhuravlev and P.P. Ufimtsev, Senior Scientific Assistant - Automation and Programming.

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CIA-RDP86-00513R000927430002-4"

Card 3/3

SOV/20-120-3-12/67

AUTHOR: Kulikovskiy, A. G.TITLE: On Media Permitting Unidimensional Motions With Homogeneous Deformation (O sredakh, dopuskayushchikh odnomernyye dvizheniya s odnorodnoy deformatsiyey)PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 3, pp. 485 - 486 (USSR)

ABSTRACT: The present paper provides an answer to the following question: What equation of state must a medium satisfy which permits unidimensional motions with homogeneous deformation? The author here investigates the following two cases: The motion satisfies either the condition of adiabaticity  $\partial S / \partial t = 0$  or the condition  $\partial T / \partial r = 0$ .  $T$  here denotes temperature. The author in the first case puts the equation of state in the form  $p = p_1(\rho, S)$ , and in the second as  $p = p_2(\xi, T)$ . If exterior forces are lacking and if internal tensions are reduced to pressure (but also in some other cases in which gravitation is taken into account), the equation of state of the impulses leads to relation

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On Media Permitting Unidimensional Motions With  
Homogeneous Deformation

SOV/20-120-3-12/67

$\frac{1}{\rho_0} \frac{\partial p}{\partial r_0} = k(t)r_0$ ;  $\rho_0$  here denotes the initial density. The last-mentioned equation is the starting point for further investigations. After some re-formations equations of state of the following type are obtained:

$$p_1(\rho, s) = f_1\left(\frac{\rho}{\rho_0(s)}\right)p_{01}(\rho_0(s)) + \varphi_1\left(\frac{\rho}{\rho_0(s)}\right)$$

$$p_2(\rho, T) = f_2(T)p_{02}\left(\frac{\rho}{\alpha(T)}\right) + \varphi_2(T).$$

The author then determines such equations of state as permit unidimensional motions with homogeneous deformation in the case of any functions  $\rho_0(s)$  and  $\alpha(T)$ . By computation the following equations are obtained:  $p_1(\rho, s) = A_1(s)\rho^{\gamma_1} + B_1$ ,

$p_2(\rho, T) = A_2(T)\rho^{\gamma_2} + B_2(T)$ . Here  $A_1, \gamma_1$  and  $B_1$  are, in general, functions of  $s$ , whereas  $A_2, \gamma_2$ , and  $B_2$  are functions of  $T$ .

Card 2/3

On Media Permitting Unidimensional Motions With  
Homogeneous Deformation

SOV/20-120-3-12/67

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova  
(Moscow State University imeni M.V.Lomonosov)

PRESENTED: January 23, 1958, by L.I.Sedov, Member, Academy of Sciences,  
USSR

SUBMITTED: January 7, 1958

1. Equations of state--Analysis 2. Equations of state--Appli-  
cations 3. Functions--Applications

Card 3/3

AUTHOR: Kulikovskiy, A.G.

20-120-5-15/67

TITLE: On Motions With a Homogeneous Deformation in the Magnetic Hydrodynamics (O dvizheniyakh s odnorodnoy deformatsiyey v magnitnoy gidrodinamike)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 120, Nr 5, pp 984-986 (USSR)

ABSTRACT: The author considers the equations of the magnetic hydrodynamics if the motion in the Lagrange form has the form

$$(L) \quad \dot{x}_i = M_{ij}(t)x_j^0 + M_i(t),$$

where the  $x_i$  are the orthogonal coordinates of the particle and  $x_i^0 = x_i(0)$ . Similar motions have already been considered in earlier papers of Sedov [Ref 1], the author [Ref 2] and Zagar [Ref 3]. In this case it is

$$(1) \quad \dot{s} = \frac{1}{\Delta} \dot{s}^0, \quad p = \frac{1}{\Delta} s^0 p^0, \quad H_i = \frac{1}{\Delta} M_{ij} H_j^0,$$

where  $\Delta$  is the determinant of the matrix  $\|M_{ij}\|$ . Substituting (1) in the motion equations  $\frac{\partial^2 x}{\partial t^2} = -\frac{1}{s} \frac{\partial p}{\partial x_i} + \frac{1}{s} \frac{\partial H_i}{\partial x_j}$ ,

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On Motions With a Homogeneous Deformation in the Magnetic Hydrodynamics 20-120-5-15/67

$T_{ij} = \frac{1}{4\pi} H_i H_j - \frac{1}{8\pi} H_k H_k$ , the author obtains an equation

$$(2) \quad \frac{d^2 M_i}{dt^2} + x_j^0 \frac{d^2 M_{ij}}{dt^2} = R.$$

It is assumed that the right side of (2) remains linear for arbitrary affine deformations of the medium. Then  $\frac{1}{g^0} \frac{\partial p^0}{\partial x_i^0}$  and  $\frac{1}{g^0} \frac{\partial H_m^0 H_n^0}{\partial x_i^0}$  are linear functions of  $x_j^0$ , i.e. it is

$$\frac{1}{g^0} \frac{\partial p^0}{\partial x_i^0} = p_{ij} x_j^0 + p_{i0} \quad \frac{1}{g^0} \frac{\partial H_m^0 H_n^0}{\partial x_i^0} = a_{mn}^1 x_j^0 + a_{mn1}^1, \text{ where } p$$

and  $a$  are constants. Let the matrix  $\|p_{ij}\|$  have the rank 3. Then  $p^0$  is an arbitrary function of  $\phi = p_{ij} x_i^0 x_j^0 + p_i x_i^0 + \text{const}$  and  $\frac{g^0}{g^0} = \omega p^0'(\phi)$ ,  $\omega = \text{const}$  and the accent means derivation with respect to  $\phi$ . If  $\frac{g^0}{g^0} \neq \text{const}$ , then  $H_i^0 H_k^0 = \alpha_{ik} p^0 + \beta_{ik}$  - the

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On Motions With a Homogeneous Deformation in the Magnetic Hydrodynamics 20-120-5-15/67

magnetic lines of force are straight lines. If  $\mathcal{G}^0 = \text{const}$ , then  $p_0 = \phi$ ,  $H_i^0 H_k^0 = \phi_{ik}$ , where  $\phi$  and  $\phi_{ik}$  are polynomials of second degree in  $x_j^0$  and  $\phi_{ik}^2 = \phi_{ii} \phi_{kk}$ . Only if all  $\phi_{ii}$  are squares of linear factors, then the magnetic lines of force are not even and are the integral curves of  $\frac{dx_i^0}{dt} = h_{ik} x_k^0 + h_i$ . Excluding the case of straight lines of force, then the gas moves according to the equation (L) if  $\mathcal{G}^0 = \text{const}$ ,  $p^0 = p_{ij} x_i^0 x_j^0 + p_i x_i^0 + \text{const}$ ,

$$H_i^0 = h_{ik} x_k^0 + h_i$$

There are 3 references, 2 of which are Soviet and 1 Italian.

PRESENTED: January 23, 1958, by L.I.Sedov, Academician  
SUBMITTED: December 27, 1957

1. Gases--Motion 2. Gas flow--Magnetic factors 3. Mathematics

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Card 3/3

10(4), 24(3)

SOV/20-121-6-9/45

AUTHOR: Kulikovskiy, A. G.TITLE: On Riemann's Waves in Magnetical Hydrodynamics (0 volnakh  
Rimana v magnitnoy gidrodinamike)PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 6, pp 987-990  
(USSR)ABSTRACT: This paper investigates the above-mentioned waves for any position of the magnetic field with respect to the wave front. This causes new mechanical effects. The author first gives the equations for the isentropic motion (as plane waves) of an ideal gas of infinite conductivity in the presence of a magnetic field. The author then investigates the solutions which depend on a certain combination of the independent variables  $\varphi(x, t)$ . The above-mentioned initial equations are adapted to this special case. The solution of this system is then discussed. The only possible solution is given explicitly. Next, other types of waves are investigated. In the automodel solutions, rotatory discontinuities correspond to the wave which propagates with the velocity  $a_1 = H_x / \sqrt{4\pi\mu}$ .

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On Riemann's Waves in Magnetical Hydrodynamics

SOV/2o-121-6-9/45

The solutions discussed in this paper may be used also for the purpose of solving the problem of the disintegration of any discontinuity in magnetic hydrodynamics and also for the solution of the piston problem. In these problems continuous solutions and also shock waves are possible. In those variables in which the problem of the Riemann (Riman) waves was solved, the variation of the quantities on the shock wave may be found in an explicit form. There are 2 figures and 2 references, one of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: April 18, 1958, by L. I. Sedov, Academician

SUBMITTED: April 17, 1958

Card 2/2

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卷之三

Wojciech M. Gajewski, *1. Szczecin'ski poligraficzny studyjny Konferencji. Problemy magnetoaktywności i plazmy. Dydaktyka; Transactions of a Conference on Magnetohydrodynamics and Plasma Dynamics; Transactions of a Conference* (Rap. Inst. do Archiw. Nauk. Szczecin. 1979). 345 p. Papierowa edycja, 1.000 egzemplarzy.

卷之三

Scientific Board: D.A. Frank-Kamenetskii, Doctor of Physics and Mathematics;  
Professor A.I. Vol'pert, Doctor of Technical Sciences, Institute of Physics and  
Chemistry of the USSR Academy of Sciences; V.I. Vekua, Candidate of Physics and  
Mathematics; V.A. Vlasov, Candidate of Physics and Mathematics; N.M. Kurnakov;  
V.N. Krylov.

**9.1. A. EYRINGEN** *Proc. Roy. Soc. (London), Series A, 1951, 203, 121.*

**SYNOPSIS.** This book is intended for practitioners working in the fields of magnetohydrodynamics and plasma dynamics.

**CONTENTS.** Half-polish contains the transactions of a conference held in Karpino, June 1950, on problems in applied and theoretical magnetohydrodynamics. One aim of the conference was to stimulate the investigation of the basic trends in the field of magnetohydrodynamics, establish contacts between the several and applied branches of magnetohydrodynamics and present the results of research in the theoretical, physical and mathematical problems of magnetohydrodynamics. More than 160 persons from different parts of the Soviet Union participated in the conference, and 55 papers were read. Sixty-four conference papers are published in the present collection. The main task of the conference was to help regularly in the future to make each conference as instructive as possible. The book presents a collection of the transactions of the conference, most of the papers and comments on papers are presented by the authors themselves in their original form. The book is divided into two parts: theoretical, basic magnetohydrodynamics and applications. The first part deals with problems in theoretical magnetohydrodynamics, and consists of 35 articles on such subjects as the existence of magnetohydrodynamic instabilities (L. D. Pustovitov), magnetohydrodynamics and the investigation of magnetic reconnection (V. I. Dobrovolskiy and A. I. Gurevich), the investigation of the magnetic field in a magnetohydrodynamic shock wave (A. I. Akhiezer), data of experiments on magnetohydrodynamics, including the application of physical methods of electromagnetic processes in liquid metals (A. I. Kondratenko) and the development of electromagnetic theory (P. O. Karpov). All the articles of the Institute of Mathematics, Kiev, and the Institute of Physics and Mathematics of the Academy of Sciences, Kiev, are devoted to theoretical problems, electromagnetic criteria, electrodynamic activity for selected problems of the application in the industrial industry including acoustics and theory of their power-energy systems. References are given at the end of most of the articles.

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AUTHORS:

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TITLE: On the Possible Kinds of Crack With a Conductivity Jump

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Mekhanika i mashinostroyeniye, 1959, Nr 4, pp 130-131 (USSR)

ABSTRACT: If in a flow of gas there is a surface with a jump-like change of its parameters, the mass-, momentum- and energy-conservation laws must be observed in the passing through this surface. Under certain assumptions made here, these laws are indicated in the form of formulas (1) (Ref 1). At given parameters of the approaching flow as well as of the electromagnetic field in front of the discontinuity surface, the formulas (1) determine the flow- and field parameters behind the discontinuity. It is shown that the presence of a single steady surface at given parameters of the approaching flow does not yet make it possible to solve only an unsteady problem with cracks of similar kind (e. g. the problem of the motion of a flat piston). The structure of the discontinuity surface with a conductivity jump is investigated. The procedure is similar to that described in the papers (Refs 2,3). The curve ABC shown in the figure is

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